AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application. Please cancel claims 1-5, 7, 12-15, 17, 22, 24-26, 28, and 30, without prejudice or disclaimer, amend claims 6, 16, and 23, and add new claims 31-35, as follows:

1-5. (Canceled).

6. (Currently Amended) A susceptor comprising:

a base metal made of a cast metal;

a heater arranged on a plane;

an upper ceramic-metal composite arranged above the heater;

~~an lower ceramic-metal composite arranged below the heater;~~ and

a ceramic electrostatic chuck ~~for holding an object to be treated, the electrostatic chuck having a coefficient of linear thermal expansion substantially the same as that of the upper ceramic-metal composite, and being joined to an upper surface of the upper ceramic-metal composite~~ having an upper surface and a lower surface opposite the upper surface, the upper surface being adapted to support an object to be processed thereon,

wherein the upper ceramic-metal composite has an upper surface joined to the lower surface of the electrostatic chuck,

wherein the heater and the upper ceramic-metal composite are cast in the base metal so that the upper ceramic-metal composite and the heater

are embedded in the base metal while leaving the upper surface of the upper ceramic-metal composite exposed for joining to the lower surface of the electrostatic chuck, and

wherein the upper ceramic-metal composite contains a ceramic material and a metallic material consisting of the base metal, and a mixing ratio between the ceramic material and the metallic material is determined so that the upper ceramic-metal composite has a coefficient of linear thermal expansion substantially the same as that of the electrostatic chuck.

7. (Canceled).

8. (Previously Presented) The susceptor according to claim 6, wherein the upper ceramic-metal composite and the electrostatic chuck are brazed together.

9. (Previously Presented) The susceptor according to claim 6, wherein the upper ceramic-metal composite and the electrostatic chuck are forge-welded together.

10. (Previously Presented) The susceptor according to claim 6, wherein the upper ceramic-metal composite and the electrostatic chuck are adhered together.

11. (Previously Presented) The susceptor according to claim 6, wherein the susceptor is configured so that a high frequency voltage is applied thereto.

12-15. (Canceled).

16. (Currently Amended) A plasma processing apparatus comprising:

a processing vessel[[,]]; and

a susceptor arranged in the processing vessel, including:

a base metal made of a cast metal;

a heater arranged on a plane;

an upper ceramic-metal composite arranged above the heater;

~~an lower ceramic-metal composite arranged below the heater;~~ and

a ceramic electrostatic chuck ~~for holding an object to be treated, the electrostatic chuck having a coefficient of linear thermal expansion substantially the same as that of the upper ceramic-metal composite, and being joined to an upper surface of the upper ceramic-metal composite; and~~ having an upper surface and a lower surface opposite the upper surface, the upper surface being adapted to support an object to be processed thereon,

~~a high frequency power source that applies a high frequency voltage to the susceptor~~

wherein the upper ceramic-metal composite has an upper surface joined to the lower surface of the electrostatic chuck,

wherein the heater and the upper ceramic-metal composite are cast in the base metal so that the upper ceramic-metal composite and the heater are embedded in the base metal while leaving the upper surface of the upper ceramic-metal composite exposed for joining to the lower surface of the electrostatic chuck, and

wherein the upper ceramic-metal composite contains a ceramic material and a metallic material consisting of the base metal, and a mixing ratio between the ceramic material and the metallic material is determined so that the upper ceramic-metal composite has a coefficient of linear thermal expansion substantially the same as that of the electrostatic chuck.

17. (Canceled).

18. (Previously Presented) The plasma processing apparatus according to claim 16, wherein the susceptor is provided with at least one heat transfer gas passage for supplying a heat transfer gas to a surface of the electrostatic chuck.

19. (Previously Presented) The plasma processing apparatus according to claim 16, wherein the upper ceramic-metal composite and the electrostatic chuck are brazed together.

20. (Previously Presented) The plasma processing apparatus according to claim 16, wherein the upper ceramic-metal composite and the electrostatic chuck are forge-welded together.

21. (Previously Presented) The plasma processing apparatus according to claim 16, wherein the upper ceramic-metal composite and the electrostatic chuck are adhered together.

22. (Canceled).

23. (Currently Amended) A method of making a susceptor, comprising:

placing a heater and a first porous ceramic block ~~pair of porous ceramics~~ in a mold ~~with a positional relationship where the pair of porous ceramics are arranged above and below the heater respectively so that the heater is positioned therebetween~~; ~~and~~

pouring a molten base metal into the mold to cast the porous ceramic block ~~pair of porous ceramics~~ and the heater in the base metal, thereby infiltrating the porous ceramic block with the base metal in order to form a ceramic-metal composite; and

joining a ceramic electrostatic chuck onto a surface of the ceramic-metal composite,

wherein a porosity of the porous ceramic block is determined so that the ceramic-metal composite has a coefficient of linear thermal expansion substantially the same as that of the electrostatic chuck.

24-26. (Canceled).

27. (Previously Presented) The susceptor according to claim 6, wherein the ceramic electrostatic chuck includes a ceramic base of a ceramic material and a metallic electrode embedded in the ceramic base and adapted to generate an electrostatic force that attracts the object to be treated.

28. (Canceled).

29. (Previously Presented) The plasma processing apparatus according to claim 16, wherein the ceramic electrostatic chuck includes a ceramic base of a ceramic material and a metallic electrode embedded in the ceramic base and adapted to generate an electrostatic force that attracts the object to be treated.

30. (Canceled).

31. (New) The susceptor according to claim 6, wherein the ceramic material contained in the upper ceramic-metal composite is in a form of a preformed porous block and is infiltrated with the base metal.

32. (New) The susceptor according to claim 6, further comprising a lower ceramic-metal composite arranged below the heater and cast in the base metal.

33. (New) The plasma processing apparatus according to claim 16, wherein the ceramic material contained in the upper ceramic-metal composite is in a form of a preformed porous block and is infiltrated with the base metal.

34. (New) The plasma processing apparatus according to claim 16, further comprising a lower ceramic-metal composite arranged below the heater and cast in the base metal.

35. (New) The method according to claim 23, wherein a second porous ceramic block is placed in the mold together with the first porous ceramic block and the heater so that the heater is arranged between the first and second porous ceramic blocks.